Welcome to the Biweekly Restoration Information Update Page. This web site

- Provides current information on wetland and river corridor restoration projects
- Recognizes outstanding restoration projects
- Provides a forum for information sharing

We welcome the submission of articles and announcements related to your restoration project. Just send your write-up to EPA's contractor at restorationupdate@tetratech-ffx.com or mail it to Kathryn Phillips, Biweekly Restoration Update Coordinator, Tetra Tech, Inc., 10306 Eaton Place, Suite 340, Fairfax, VA 22030. We will carefully consider your submission for inclusion in a future update. If your submission is selected, please note that it might be edited for length or style before being posted. Because this web site is meant to be a public forum on restoration information, we cannot post any information that is copyrighted or information that serves or has the appearance to serve as advocating or lobbying for any political, business, or commercial purposes.

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- <u>Feature Article</u> Our feature article recognizes outstanding restoration projects or programs.
- <u>Five-Star Restoration Projects Update</u> Five-star restoration projects will be revisited periodically to see if the modest amount of funding, between \$5,000 and \$20,000, has helped the local restoration partners achieve their goal.
- <u>Community-Based Restoration Partnerships</u> This section highlights innovative community-based partnerships working to restore wetlands and river corridors.
- <u>Funding for Restoration Projects</u> Here you'll find information pertaining to grants and other funding sources available to local watershed groups and other grassroots community organizations to implement restoration projects.
- News and Announcements This section includes up-to-date information on regulatory issues affecting restoration, conference and workshop announcements, and other newsworthy tidbits.
- Restoration-Related Web Sites Check out other groups on the Web that are helping in the effort to restore wetlands and river corridors.
- <u>Information Resources</u> Books, journals, fact sheets, videos, and other information resources to aid you in your restoration project are provided here.
- Ask a Restoration Question Post your restoration related question. Answers will be provided by the EPA and Bi-Weekly readers.

Feature Article

Working Together to Make Restoration Work

The Saginaw Bay watershed community is working to ensure that the watershed remains one of Michigan's most diverse areas. The watershed's rich resources support agriculture, manufacturing, tourism, outdoor recreation, and a vast variety of wildlife. Including all or part of 22 counties, it is also Michigan's largest watershed and America's largest contiguous freshwater coastal wetland system. This wetland extends along the shores of Saginaw Bay and provides habitat for large populations of waterfowl, birds, and more than 90 fish species. The watershed is also home to more than 1.4 million people. With so many people living in the watershed and using its resources, conflicts have arisen between the needs of residents and wildlife. In response, community partners came together to form WIN, a voluntary, nonregulatory partnership. WIN understands that the resources of the Saginaw Bay watershed are shared by residents, who use water for recreation, drinking water, and industrial processes, and wildlife such as migratory birds, waterfowl, and fish that need clean water and undisturbed wild areas to

survive. WIN works to balance the economic, environmental, and social priorities in the watershed so that wildlife and people can live together peacefully.

WIN is comprised of communities, conservation groups, foundations, and businesses who strive to create a sustainable future for all of the watershed's inhabitants. Foundations like the Bay Area Community Foundation, Charles J. Strosacker Foundation, Charles Stewart Mott Foundation, Dow Chemical Company Foundation, Herbert H. and Grace A. Dow Foundation, S.C. Johnson Fund, and Cook Family Foundation, together with other project sponsors, contribute \$300,000 per year to support WIN projects.

WIN believes in supporting projects, not bureaucracy. Local projects increase communication between existing efforts and foundations willing to support local efforts. WIN supported the Fish Point Wetland Restoration Project. The project restored 64 acres of marsh and wetland habitat and has the potential to benefit area residents by providing bird watching, hiking, and nature-based tourism opportunities. In 2001 WIN provided \$237,000 to local projects, including the Shiawassee River Streambed Stabilization Demonstration. The project used channel stabilization techniques to reduce the amount of sediment carried by the river and prevented silt deposits that could have degraded downstream fish habitat. Other projects sponsored by WIN in 2001 include water quality analysis, public education, and nonpoint source pollution reduction projects. To date, WIN and its partnering corporations and foundations have provided more than \$900,000 to support restoration and sustainability in the Saginaw Bay watershed. For more information, visit the Saginaw Bay WIN web site http://www.saginawbaywin.org/.

If you'd like your project to appear as our next Featured Article, email a short description to restorationupdate@tetratech-ffx.com.

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Five-Star Restoration Projects Update

The goal of EPA's Five-Star Restoration Program is to bring together citizen groups, corporations, youth conservation corps, students, landowners, and government agencies to undertake projects that restore streambanks and wetlands. The program provides challenge grants, technical support, and peer information exchange to enable community-based restoration projects. A few Five-Star restoration projects are being revisited to see if the modest amount of funding (between \$5,000 and \$20,000) has helped the local restoration partners achieve their goals.

Project Title: Bales Park Wetland Restoration

Five-Star Grant: \$10,000

Grant to: Greenway Network, Inc.

Location: St. Charles, Missouri

Original Proposal:

Greenway Network, Inc., will restore wetlands at Bales Park along the Missouri River, where homes and trailers were devastated during the 1993 flood. The project will be implemented in partnership with the St. Charles Parks and Recreation Department, St. Charles Rivers and Streams Project, Missouri Department of Conservation, and Environmental Strategies. Local schools will use the restored wetlands as an outdoor classroom.

Update:

Volunteers involved in the Bales Park Wetland Restoration Project have succeeded in converting a soggy area that collects watershed runoff into a thriving wildlife habitat. The City of St. Charles, Missouri, and the Greenway Network, a grassroots organization promoting natural resource conservation and sound wetland management, joined to sponsor a wetland restoration day on October 23, 1999. Local St. Charles residents and members of Francis Howell High School's Students Acting for the Environment teamed up to plant wetland plants, including water plantain, blue flag iris, arrowhead, brown-eyed Susan, and March blazing star in the soggy ground. The wetland area is now a thriving wildlife habitat for butterflies, frogs, and other wildlife. The wetland

also improves water quality by acting as a natural water purifier. To further diversify the wildlife habitat, Greenway Network has planted 18 floodplain trees near the wetland area. The newly completed wetland area will be a valuable educational area. An outdoor classroom shelter has been constructed adjacent to the wetland area. Additionally, the public can now access the wetland, thanks to a footbridge constructed by a local Eagle Scout. Further trail construction will be completed as funds become available. To further increase the educational value of the area, Greenway Network purchased 10 exhibit signs and placed them strategically around the wetland.

Project Title: Restoring Wetlands in Chemung Basin

Five-Star Grant: \$10,000

Grant to: Chemung County Soil and Water Conservation District

Location: Horsehead, New York

Original Proposal:

The Chemung County Soil and Water Conservation District will restore 20 acres of wetland habitat for waterfowl and other wildlife in the Seeley Creek watershed. The seven project partners include agencies of the Town of Southport and Chemung County, Ducks Unlimited, Upper Susquehanna Coalition, and the U.S. Fish and Wildlife Service. The restored wetlands will be part of a larger demonstration project of how a watershed approach can integrate water quality protection, flood attenuation, and habitat restoration.

Update:

The Upper Susquehanna Coalition, which includes the Chemung Basin, has developed a "multiple-barrier approach" to water quality/quantity problems using wetlands, floodplain restoration, stream geomorphology/riparian buffers, citizen outreach, and stormwater planning. In August 2000 the coalition completed the construction of two 2-acre wetlands in the Dry Run tributary of Seeley Creek.

This project was the first completed under the Watershed Wetland Program. The program develops wetlands in the Chemung Basin to help with flood attenuation, drought protection, water quality, and habitat improvement. The two wetlands are used to demonstrate the benefits and functions of wetland. The project has also been a good example of how diverse partnerships can be formed. The most exciting are the alliances that have formed between local town constituencies involved in flood reduction and organizations involved with habitat enhancement. The Upper Susquehanna Coalition, Southport Drainage Committee, and Seeley Creek Watershed Association publicized this program through a media event. They invited interested government officials, project partners, the press, and area citizens to a ceremony dedicating the completed wetlands and announcing the beginning of a long-term program to reduce flood events and improve wildlife habitat through wetland development. The high point of the event was placement of the Five-Star plaque supplied by EPA on a large glacial erratic boulder retrieved from one of the wetland sites.

The Watershed Wetland Program is in the process of developing eight additional wetland sites in an adjacent watershed. Of these eight sites totaling over 100 acres, two have been delineated and three have been surveyed for potential, mostly thanks to the help of the NRCS. Catatonk Creek, another watershed organization, also has been helpful with tracking the completion of these projects. In this and future projects, the Upper Susquehanna Coalition will continue to pursue development of the Watershed Wetland Program.

Project Title: Bartlett Brook Riparian Restoration

Five Star Grant: \$10,000

Grant to: Vermont Department of Environmental Conservation

Location: South Burlington, Vermont

Original Proposal:

The Bartlett Brook Riparian Restoration project is the first phase of a two-phase demonstration

project to restore water quality and wildlife habitat in a highly urbanized stream in South Burlington. The Vermont Department of Environmental Conservation will work with the City of South Burlington, the Vermont Youth Conservation Corps, local high school students, and community volunteers to restore about 100 meters of the most eroded reach of the brook using innovative bioengineering techniques. Among the project's many benefits, restoration of the brook will benefit a small population of mottled sculpin, a rare fish species in Vermont.

Update:

At this time, construction has not yet taken place, but progress has been made toward that goal. The 100 meters of the most eroded reach of the stream will be restored using the natural channel design technique and will incorporate numerous bioengineered structures. The partnership has developed a brochure for commercial landowners in the watershed that addresses proper stormwater facility maintenance and hazardous materials practices such as cleanups of spills. The watershed has numerous automotive retail and service shops and the partnership thought public outreach was one way to obtain better source controls on this "hot spot" type of runoff. In exchange for agreeing to abide by several clean water principles, a retail establishment can have its name printed in the brochure along with a number on a map showing its location. A local school group did all the work and had excellent success in getting owners to sign up.

Project Title: Crex Meadows School Without Walls

Five Star Grant: \$10,000

Grant to: Northwest Wisconsin Concentrated Employment Program

Location: Grantsburg, Wisconsin

Original Proposal:

The Northwest Wisconsin Concentrated Employment Program will work with at-risk youth to restore wetlands at the Crex Meadows Area in Grantsburg, Wisconsin. Environmental education and job skills training also will be part of the project. The project will be implemented in partnership with the Wisconsin Department of Natural Resources, Grantsburg School District, City of Grantsburg, and U.S. Forest Service.

Update:

Fifty-three youth, many from economically disadvantaged backgrounds, took part in the 1999 Crex Meadows School Without Walls Program. The program, funded by the Five-Star Program and conducted by the Wisconsin Department of Natural Resources and the U.S. Forest Service, provided summer work and educational programs for youth ages 14 through 18. Through the completion of restoration-related projects, youth participants learned job skills, including responsibility, teamwork, problem solving, adapting to change, information processing, and persistence. They also took home a paycheck.

The main intent of the restoration work completed by the youth was to restore wetland breeding areas for waterfowl, amphibians, and other animal and plant species. During their summer work, the youth also created and maintained facilities allowing the public access to the wetland. The youth worked to remove invasive species, collect amphibians, band geese, construct duck blinds and bat houses, and maintain trails and other park structures. Students completed more than 5,000 hours of restoration work.

In addition to learning job skills, the students also took part in a number of formal educational programs. They worked on resume writing and interviewing skills, and were given the opportunity to explore environmental and conservation-related careers. The U.S. Forest Service offered workshops on dragonflies, wolves, migratory birds, and trapping and fur-bearing animals. The Wisconsin Department of Natural Resources gave the youth a tour of the Spooner Fish Hatchery and introduced them to the wildlife native to Crex Meadows.

For more information on EPA's Five-Star grant program, visit http://www.epa.gov/owow/wetlands/restore/5star/.

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Community-Based Restoration Partnerships

Nursing a Wetland Back to Health

A small Seattle wetland is being restored to its original state, thanks to a unique local partnership. Friends of Pritchard Beach, a neighborhood volunteer organization, has teamed up with the South Division of the Seattle Department of Parks and Recreation (SDPR), Seattle Audubon Society, Seattle Sierra Club, University of Washington/Washington Park Arboretum, Seattle School District (Dunlap Elementary, South Shore Magnet Middle School, and Rainier Beach High School), and others to restore a 4.3-acre wetland. Located in Pritchard Beach Park, a neighborhood park on the shores of Lake Washington, the marshy wetland area had been filled in during construction of a bathing beach in the early 1900s. The wet area that remained on the site had been used by the city as a nursery since 1954. To restore the wetland, the partners reshaped the site, removed an existing building, and removed fill material from the wetland. They also created a pond and a wet meadow.

The partners also wanted the wetland to serve as an educational resource, so they built an educational amphitheater, boardwalks, and pathways and installed educational signs for visitors. The group plans to work with local schools and project partners to create an educational program the fits with the schools' academic requirements.

Funds for the project were provided from many sources, including grant funds (King County Water Quality Block Grant, \$50,000; City of Seattle Dept. of Neighborhoods Matching Fund Grant, \$85,000; and King County Urban Reforestation and Habitat Restoration Grant, \$8,000) and private fundraising, along with foundation support. SDPR, the World Conservation Corps, and private contractors supplied major earthmoving and large scale-planting. More than 1,000 volunteers from various partner organizations have helped prepare and maintain the project site. For more information, see http://www.scn.org/neighbors/pritchardpark/ or contact Jay or Leslie Gerring at 8616 Island Drive South, Seattle, WA 98118. Phone: (206) 721-1367, email: fopbp@slingshot.com.

Awareness and Action in a San Diego Salt Marsh

A partnership in San Diego is taking a unique approach to community wetland restoration. Last September the partnership hosted the Wetland Avengers community event, attended by almost 600 participants. The event was designed to first teach the participants about wetlands and then give them the opportunity to help restore and clean up a salt marsh area at Ocean Beach. After registering, participants ("Avengers") moved on to a dress-up table, where they accessorized with camouflage clothing and camouflage face paint. The youth created their own "wetland wanted" posters at activity booths and won raffle tickets playing bird bingo. The day's events also included mural painting, a live D.J., and booths offering enjoyable and educational ways for everyone to help create a better San Diego. Each participant received a T-shirt, water bottle, lunch, and beverages.

Local biologists led the Avengers on educational and interactive tours of the wetland. Avengers learned to identify native and nonnative plants, wetland birds, and other salt marsh inhabitants. Avengers then transferred their new awareness into immediate action by helping to remove nonnative invasive species, trash, animal waste, and unnecessary paths.

Wetland Avengers is a collaborative effort by Aquatic Adventures Science Education Foundation and Project Pacific, in partnership with the Volunteer Center of San Diego. It is sponsored by Home Depot, San Diego Gas & Electric, and other supporters. The partnership is already planning the next Wetland Avengers event, scheduled for Saturday, May 4, 2002. For more information, see http://www.projectpacific.org/wetland.html, or contact Project Pacific, 4455 Lamont Street, Suite C, San Diego, CA 92109. Phone: (858) 270-8851, email: actions@projectpacific.org.

If you are part of an innovative community-based partnership that is working to restore river corridors or wetlands, we'd like to hear from you. Please send a short description of your partnership to restorationupdate @tetratech-ffx.com.

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Bear Lake National Wildlife Refuge Preserves Habitat in the Great Basin

Wetland habitat is rare throughout the West's Great Basin region. The few wetland areas in this region are crucial stopover points for migrating waterfowl. Bear Lake, approximately 60 miles northeast of the Great Salt Lake, is one such waterfowl stopover point. Since the early 1900s, however, human management of the lake has made it a precarious nesting spot. The

construction of canals and pumping stations to facilitate the use of water for power generation and irrigation have disrupted the natural hydrology of surrounding marshes. Continuously changing water levels have often destroyed waterfowl nests. In addition carp, introduced into the canals to control vegetative growth in the lake's irrigation system, soon moved into marsh areas and removed vegetative growth there as well. The decrease in aquatic vegetation caused problems for waterfowl that depended on the vegetation as a vital food source. Even after the U.S. Fish and Wildlife Service established the Bear Lake National Wildlife Refuge in 1968, conditions were not ideal for nesting and migratory waterfowl despite continual work by refuge staff to improve marsh habitat.

A recent partnership between Ducks Unlimited, PacifiCorp, Idaho Department of Fish and Game, and the U.S. Fish and Wildlife Service has been making progress to improve wildlife habitat. In spring 2000 a 5-mile-long dike was completed separating the marsh from the irrigation canal, and PacifiCorp installed water control structures that allowed the marsh water level to stabilize. In addition, the structures allowed the project team to rid the marsh area of carp. Aquatic vegetation has reestablished itself in the marsh, and project partners expect an eight-fold increase in breeding waterbirds inhabiting the marsh this spring. For more information, contact Mark Biddlecomb, Ducks Unlimited, Inc., Western Regional Office, 3074 Gold Canal Drive, Rancho Cordova, CA 95670-6116, or email: mbiddlecomb@ducks.org.

Corps of Engineers Leads the Way in Restoration Projects

New realizations about the importance of wetlands and the need to repair habitat along historically altered rivers have changed the focus of work undertaken by the U.S. Army Corps of Engineers. Instead of trying to control rivers with man-made structures and increase farmland by filling in wetlands, the Corps now supports large-scale ecosystem restoration efforts. The Corps has played a large part in restoring the Florida Everglades and also is working to restore habitat along the Upper Mississippi River. Currently, the Corps spends more than \$500 million annually on habitat and wetland restoration projects.

Over the past 2 years, the Corps has planned or constructed more than 50 habitat restoration projects in 25 states. Projects have included such activities as wetland creation through berm construction, stream restoration, exotic species removal, aquatic vegetation planting, and riparian vegetation restoration. These projects have restored more than 2,000 acres of native habitat in Oregon, Arkansas, California, South Carolina, Maryland, Kansas, Mississippi, Indiana, Michigan, Tennessee, Massachusetts, Missouri, and Washington State. To read more about the projects completed by the Army Corps of Engineers, visit

http://www.amrivers.org/corpsreformtoolkit/habitatrestoration.htm. To seek assistance from the Corps of Engineers on wetland restoration projects, visit http://www.wes.armv.mil/el/wetlands/wetlands.html.

If you are part of an innovative restoration project that has had positive results, we'd like to hear from you. Please send a short description of your project to restorationupdate@tetratech-ffx.com.

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Funding for Restoration Projects

New Listings:

American Sportfishing Association's FishAmerica Restoration Grants

The FishAmerica Foundation is the conservation and research projects arm of the American Sportfishing Association. The National Oceanic and Atmospheric Administration (NOAA)/FishAmerica Restoration Partnership supports habitat restoration projects designed to benefit recreational fish and their prey species, including the removal of fish passage blockages and the restoration of riparian and mangrove vegetation. Projects are usually funded for between \$5,000 and \$30,000. Proposals are accepted twice a year and the next deadline is March 11, 2002. For more information, contact Mike Nussman or Tom Marshall at (703) 519-9691 or visit the web site http://www.nmfs.noaa.gov/habitat/restoration/funding_opportunities/funding.html.

2002 Community-Based Fishery Habitat Restoration Projects

NOAA Restoration Center, under the Community-Based Restoration Program, has recently announced that funding is available for Fishery Habitat Restoration Projects. The Fisheries and

Habitat Partnership Project supports cooperative projects with America's food fishing industry to restore habitat and enhance the living marine resources of the United States. Typical project awards range from \$50,000 to \$200,000. The deadline for application submission is April 15, 2002. For more information, contact Robin Bruckner or Alison Ward at (301) 713-0174 or visit the web site http://www.nmfs.noaa.gov/habitat/restoration/funding.html.

Gulf of Maine Council on the Marine Environment Habitat Restoration Grants Program
This grant program is the first year of a 3-year partnership between the U.S. Association of
Delegates to the Gulf of Maine Council on the Marine Environment and the NOAA National
Marine Fisheries Service's Fisheries Community-based Restoration Program. The purpose of this
partnership is to further the Council's goal of restoration of marine, coastal, and riverine habitats
in Maine, Massachusetts, and New Hampshire. The Council is interested in funding projects that
will result in on-the-ground restoration of habitat to benefit living marine resources, including
anadromous fish species, wetland plants and animals, aquatic vegetation, and shellfish beds.
This grant program will consider funding projects that address both project design and
implementation. A total of \$285,000 is available for 2002 projects, with awards ranging between
\$5,000 and \$50,000. Proposals are due no later than March 15, 2002. For more information visit
the web site http://www.gulfofmaine.org/council/opportunities/.

Pacific Grassroots Salmon Initiative

This year is year five of a partnership between the U.S. Bureau of Reclamation, NOAA's Fisheries Community-Based Restoration Program, and the National Fish and Wildlife Foundation (NFWF) known as the Pacific Grassroots Salmon Initiative (PGSI). PGSI seeks to benefit native anadromous fishes and their habitats in California and Oregon. Projects eligible for funding include in-stream restoration, salmonid habitat conservation planning, land and water acquisition, applied research, and public education and outreach. Most grants range from \$25,000 to \$50,000 in NFWF federal funds, but grants may range from \$5,000 to \$100,000. Applications must be received by March 15, 2002. For more information, contact Anna Weinstein of the NFWF at (415) 778-0999 x222, email: weinstein@nfwf.org, or visit the web site http://www.nfwf.org/programs/PGSI_RFP.htm.

Please send any news you have on funding mechanisms available to local community organizations to restorationupdate @tetratech-ffx.com.

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News and Announcements

New Watershed Initiative Fact Sheet and Implementation Schedule Available

The latest fact sheet and draft implementation schedule for the FY03 Watershed Initiative Program is now available through the EPA web site at

http://www.epa.gov/owow/watershed/initiative/. The web site provides an overview of the Watershed Initiative Program and a link to the most recent implementation schedule for the \$20 million in grants EPA is putting toward supporting community-based watershed approaches.

Major Wetland Restoration Under Way in Wisconsin

The Natural Resources Conservation Service (NRCS) and the Wisconsin Department of Natural Resources have teamed up to create the largest individual Wetland Reserve Program easement in Wisconsin. According to Greg Igl, NRCS district conservationist, "The wetland will extend for more than 5 miles in the northwest part of Walworth County." The planned restoration work on the 1,800 acres of prime wetland in the southeastern part of the state will most likely be phased in over a 3-year period with seeding, drainage ditch filling, tile disabling, and construction activities beginning next spring. The herons and blue-wing teal are not back yet, but once the wetland is completed it will become an irresistible attraction for these waterbirds and other wildlife. The restored wetland will provide outdoor recreational opportunities such as hiking, hunting, and wildlife viewing for the part of the state with the highest population and the least amount of public recreational land.

EPA Now Accepting Nominations for 2002 Environmental Quality Awards

Each year EPA Region 2 seeks to recognize and honor individuals and organizations who contributed significantly to improving the environment during the past year in New Jersey, New

York, Puerto Rico, and the U.S. Virgin Islands. The nomination deadline is March 4. Award recipients will be honored at a ceremony in late April at EPA's Manhattan offices. Those who wish to submit nominations should visit EPA Region 2's Environmental Quality Award web page at http://www.epa.gov/region2/eqa/ to view the award categories, award criteria, and nomination instructions. Self-nominations are welcome. For more information, contact Chris Sebastian, EPA Region 2, Communications Division, at (212) 637-3597 or sebastian.chris@epa.gov.

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Upcoming Conferences and Events: NEW LISTINGS:

Spring 2002 National Smart Growth Leadership Program

March 4-8 and May 6-10, 2002

College Park, Maryland

Smart Growth is a valuable tool for promoting responsible land use. Responsible land use can reduce peak periods of storm water discharge and nonpoint source pollution. Reducing urban runoff greatly benefits wetlands and watersheds. The National Smart Growth Leadership Program is a useful course designed to provide critical skills and knowledge to federal, state, local, industry, and nonprofit policy makers. The course is offered by the School of Public Affairs and the National Center for Smart Growth Education and Research at the University of Maryland. The program is a 2-week residential program that will be held March 4–8 and May 6–10, 2002. Between the two residential weeks, course material will be enhanced through web sessions. The cost of the program is \$4,150, which includes tuition, course materials and fees, and light breakfasts and lunches on class days. Partial tuition scholarships may be available. For more information, contact Danielle W. Koontz, Office of Executive Programs, School of Public Affairs, University of Maryland, 1127 Van Munching Hall, College Park, MD 20742-1821. Phone: (301) 405-1168, email: dw190@umail.umd.edu.

Hydrophytic Vegetation Workshop

March 20-23, 2002

Atlantic City, New Jersey

The goals of this conference are to investigate nationwide contemporary hydrophytic vegetation issues and increase dialogue between federal, state, and local regulatory agencies, nongovernmental organizations, the private sector, and the regulated community. Workshop activities will include sessions on vegetation sampling, remote sensing, problematic vegetation communities, and invasive species; a time for information exchange; and networking opportunities. The conference will be held at the Holiday Inn–Boardwalk in Atlantic City, New Jersey. The registration fee is \$160, with a discount possible for early registration before March 4. For more information, contact Frank Reilly at (540) 286-0072 or reillygroup@msn.com.

Wetlands 2002: Restoring Impaired Wetlands and Other Waters

October 7–9, 2002 Indianapolis, Indiana

This national EPA-sponsored conference is designed to assess the success and failure of science and policy related to the restoration of wetlands and related waters and to identify methods for future success. Topics addressed at the conference will include impaired wetlands and waters, restoration programs, monitoring and assessment, water quality standards for wetlands, isolated wetlands, integrating wetlands and watershed and land use management, and wetland regulation.

Presentation abstracts are being accepted. This call for papers encourages presenters to forward abstracts that will help define the critical components of sound science and balanced policy on the project, landscape, and/or national level. The submission deadline is March 1, 2002. For more information visit the web site http://www.ctic.purdue.edu/Core4/Core4.html or contact Tammy Taylor at taylor@ctic.purdue.edu.

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PREVIOUS LISTINGS EMAP Symposium 2002 April 24-27, 2002 Pensacola Beach, Florida The Environmental Monitoring and Assessment Program (EMAP) Coastal Symposium 2001 is a 4-day symposium jointly sponsored by the EPA's Office of Research and Development and the Council of State Governments. The symposium will provide a forum to present and discuss the results of successful programs. Federal, state, tribal, and academic scientists will be given the opportunity to develop new partnerships to advance the science of monitoring and assessing coastal resources. Topics for discussion at the symposium include:

- Coastal 2000's scientific programs and how they have met state and tribal needs.
- Partnerships between federal, state, tribal, and academic organizations in coastal research and monitoring.
- The achievement of more efficient, less expensive, and more scientifically rigorous monitoring and assessment.
- How research can lead to a better understanding of the roles of monitoring, assessment, and identifying, diagnosing, and solving coastal problems.
- How academic research supported by ORD's Science to Achieve Results program has
 promoted the development of new ecological indicators for monitoring and assessing the
 condition of the coastal environment.

Enhancing the States' Lake Management Programs: Managing Invasive Species in Lakes and Reservoirs

April 23-26, 2002

Chicago, Illinois

State lake program managers, statewide lake associations, volunteer monitors, and federal and local mangers are invited to this national meeting to discuss successes, evaluate obstacles, and explore new approaches for improving state lake management programs. This year's theme is invasive species and their management. Registration is \$165 until March 29. For more information, contact Bob Kirschner, Chicago Botanic Garden, at (847) 835-6837 or bkirschn@chicagobotanic.org.

To post your restoration news and announcements, please send information to restorationupdate@tetratech-ffx.com.

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Restoration-Related Web Sites

http://www.crjc.org/riparianbuffers.htm

Riparian Buffers for the Connecticut River Valley. This site offers 10 fact sheets on different types of riparian buffers, including backyard, forestland, habitat, agricultural, and urban buffers, as well as information on community guidance, planting tips, and field assessment. This site would be useful to anyone wishing to learn about the different types of riparian buffers and the characteristics of each type.

http://gulfofmaine.org/

The Gulf of Maine Council on the Marine Environment. The mission of the Gulf of Maine Council is to maintain and enhance environmental quality in the Gulf of Maine and to allow for sustainable resource use by existing and future generations. The web site provides links to habitat restoration grants, a discussion forum, and a calender of events. This site would be useful for anyone planning a restoration effort in the Gulf of Maine or seeking to learn more about restoration efforts there.

http://www.nmfs.noaa.gov/habitat/restoration/

The NOAA Restoration Center performs restoration in response to federal legislation and works to improve restoration ecology and habitat management. Its three main objectives are to restore degraded coastal habitats, advance the science of habitat restoration, and transfer restoration technology to agencies capable of doing restoration work. This site provides a variety of funding and information resources to anyone involved in coastal restoration projects.

http://www.ecy.wa.gov/forms/showcase/

Showcase of Exceptional Education Products. The state of Washington's Department of Ecology has developed a web site containing educational products related to nonpoint source water pollution, including publications, videos, and classroom materials. The site provides contact information as well as other useful background information so that users can obtain the products and adapt to their needs. This site would be useful to classroom teachers or other instructors looking for nonpoint source-related materials or working to restore wetlands impaired by nonpoint source pollution.

http://www.rivernetwork.org/library/libriviss strcare.cfm

Stream Care Guide. This practical guide on stream care was compiled by American Rivers. It provides recommendations on how to keep a stream healthy, stream-friendly gardening practices, protecting stream flow, and preventing erosion. This guide would be useful to residents and businesses located near streams.

http://www.streamkeeper.org/

The Adopt-a-Stream Foundation The Adopt-A-Stream Program was created in 1981 to increase public awareness of the importance of the 3,000 miles of creeks, streams, and rivers in Snohomish County, Washington and to restore to health those waterways damaged by people or nature. *This organization provides environmental education workshops and stream restoration expertise.*

http://www.state.ak.us/local/akpages/FISH.GAME/habitat/hab_home.htm

The Habitat and Restoration Page, sponsored by the Alaska Department of Fish and Game, provides information on restoration guidelines and habitat restoration projects under way in Alaska. It also provides links to technical assistance and publications on stream corridor restoration. This information would be useful to anyone looking for stream corridor restoration information.

http://www.twingroves.district96.k12.il.us/Wetlands/Bog/VoloFieldTrip.html

Virtual Field Trip to Volo Bog. This site, developed by Twin Groves School in Buffalo Grove, Illinois, offers a virtual tour of the Volo Bog in McHenry County, Illinois. This wetland is significant because it is the only quaking mat bog in Illinois that exhibits all stages of zonal plant succession. This site offers pictures and descriptions of wetland plants found in Volo Bog, as well as a movie of the bog entrance. This site is a good example of a wetland education school project that also serves as a valuable educational resource for the public.

http://swamp.ag.ohio-state.edu/ORW.html

Olentangy River Wetland (ORW) Research Park. Located at The Ohio State University, the ORW Research Park serves as a wetland research and education facility. The site offers information about research currently taking place at the ORW, ORW publications, links to other wetland sites, and a virtual tour of the ORW. This site would be useful for anyone interested in wetlands research.

http://www.highlandpark.org/pwslough/

Prairie Wolf Slough Wetland Restoration. The Prairie Wolf Slough wetland restoration site provides information about a wetland restoration project along the Chicago River. The site describes the history of the 40-acre wetland and explains how it is used to educate local students and the public. This site is a good example of how a restored slough can be used for public education purposes.

Let us know about your restoration-related web site. Please send relevant URLs to restorationupdate@tetratech-ffx.com.

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Information Resources

Waterfowl of Illinois: Status and Management

by Stephen P. Havera

This 672-page book is a comprehensive resource on the status, management, and biology of Illinois waterfowl. Havera places the major emphasis on wetland habitats, food habit analyses, population analyses, banding results, harvest information, historical records and regulations, private duck clubs, Canada geese, nesting information, and waterfowl management. This book captures the strong traditions of waterfowling in the heart of the Mississippi Flyway and contains illustrations, tables, and color photos. The book costs \$59.95 and can be ordered from http://kato.theramp.net/inhswaterfowl/page8.html.

Waterfowl of Illinois: Abbreviated Field Guide

by Stephen P. Havera

Havera's abbreviated guide provides information on the waterfowl of Illinois, including their life history, food, and habitats. Waterfowl are brought to life through full-color photographs and illustrations. This guide would be a useful resource to hunters, bird watchers, and wildlife enthusiasts. It can be ordered on-line from http://kato.theramp.net/inhswaterfowl/page8.html for \$14.95.

An Investigation of the Interrelation of Everglades Hydrology and Florida Bay Dynamics to Ecosystem Processes in South Florida

by the U.S. Geological Survey, 2001

Available on-line and for download at http://sflwww.er.usgs.gov/publications/fs/49-01/, this fact sheet outlines the USGS's effort to identify and document the interrelation of the responses of freshwater-wetland and coastal-marine ecosystems to past and present disturbances, both natural and human-imposed. The project is synthesizing findings of geological, hydrological, and ecological investigations in the Southern Inland and Coastal Systems study area, which encompasses the interface of the Taylor Slough and C-111 drainage basins of the Everglades with nearshore embayments of Florida Bay. The objectives of the project are to (1) document the historical effects of past disturbances, (2) provide background scientific insight needed for ecological analyses of species habitat and sustainability, (3) identify cause-and-effect hydrological and ecological linkages, and (4) produce a summary report that presents any findings that link hydrological and ecological changes to past management practices.

Voices of the Great Marsh: An Educational Video

by Eight Towns and the Bay (8T&B)

This 14-minute video describes Great Marsh, a highly productive wetland ecosystem that extends from Massachusetts' Cape Ann into New Hampshire and covers over 17,000 acres. The video explores the stories of the Great Marsh, its significance to the local natural and cultural heritage, and why it needs to be protected. 8T&B promotes the value of the wetland resource and places it in the context of the historical landscape by illustrating uses of the marsh over time, its economic benefits, its value for recreation, and its importance as habitat for countless plant and animal species. For more information see

http://www.mvpc.org/services_sec/mass_bays/8T&B_video.htm. Copies of the video are available for \$10 (plus \$2 shipping). To order a copy, email: ecademartori@mvpc.org.

If you'd like to publicize the availability of relevant information resources, please send information to restorationupdate @tetratech-ffx.com.